

Long Haul

STS-75 crew brings home 16 days' worth of scientific data

The STS-75 turned out to be one of the longest on record as *Columbia's* crew collected scientific data for scientists around the world during their 16 days on orbit. During the flight, a total of four Americans, four Russians and four Europeans were in orbit at the same time following the launch of the Mir 21 crew aboard a Soyuz spacecraft.

Although the Tethered Satellite broke its tether and reentered the Earth's atmosphere last week, scientists collected extensive data on tether dynamics and electricity generation and developed goals for further study. The United States Microgravity Payload materials processing experiments exceeded scientists' expectations.

Columbia landed March 9 after one extension day for science, and one extension day and one extra orbit for weather, covering some 6.5 million miles in all over 15 days, 17 hours, 40 minutes in orbit. Through it all the crew took photos to share:

From top to bottom, left to right:

- 1) Mission Specialists Jeff Hoffman, left and Maurizio Cheli set up an experiment in the glovebox on *Columbia's* middeck.

- Glovebox experiments tested combustible materials in microgravity;
- 2) The traditional in-flight crew portrait back row from left are Cheli, Mission Specialists Claude Nicollier, Pilot Scott Horowitz and Payload Specialist Umberto Guidoni. Front row from left are Payload Commander Franklin Chang-Diaz, Commander Andy Allen and Hoffman;
 - 3) The Tethered Satellite System was reeled out from *Columbia's* cargo bay before breaking free of its tether and drifting off into space;
 - 4) Nicollier mans the commander's station on *Columbia's* flight deck during an engine firing sequence for the USMP;
 - 5) Hoffman, left, and Chang-Diaz celebrate their 1,000 hour mark in orbit;
 - 6) Guidioni dons his launch and entry suit for the return trip to Kennedy Space Center;
 - 7) Cheli operates the Tether Optical Phenomenon System on *Columbia's* flight deck;
 - 8) Allen sets up systems for a television downlink on *Columbia's* flight deck; and
 - 9) Horowitz looks over tools he would use to perform in-flight maintenance on *Columbia*. □

